Land Capability Classification

The land capability classification system is used to show, in a general way, the suitability of soils for cropland. It is a three-category interpretative system. The two highest categories, class and subclass, give broad perspective of the suitability of map units for certain crops or pasture. These categories indicate the degree and kinds of limitations for these uses. The system evaluates soils for mechanized farming systems that produce the more common cultivated field crops, such as corn, small grains, cotton, hay, and field grown vegetables.

Capability Class

The highest category of the system is the capability class. The capability classes are groups of soils that have the same general suitability for the broad kinds of use common on farms and ranches. There are eight classes designated by Roman numerals I through VIII.

Classes I, II, III, and IV are suitable for mechanized production of common field crops if properly managed, and for production of pasture and woodland. The degree of limitation for production of cultivated crops increases progressively for class I to class IV. Limitations may affect production as well as the risk of permanent soil deterioration, as by erosion.

Classes V, VI, and VII are generally not suited to mechanized production of common field crops without special management, but are suitable for permanent cover such as grasses and trees. The severity of the soil limitations for crops increases from class V to class VII. Areas in class VIII are generally not suitable for crops, pasture, or wood products without management that is impractical. Class VIII areas may have potential for other uses, such as recreation or wildlife habitat.

Capability Subclass

The subclass identifies the dominant kind of limitation in the class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, IIe. The letter e shows that the main limitation is risk of erosion unless a close-growing plant cover is maintained: w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

There are no subclasses in class I because the soils of this class have few limitations. The soils in class V are subject to little or no erosion, but they have other limitations that restrict their use mainly to pasture, woodland, wildlife habitat, or recreation. Class V contains only the subclasses indicated by w, s, or c.

Capability Unit

The lowest category of the capability system is the capability unit. Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Units are designated by Arabic numerals, for example IIe-2. This category is not used in all soil surveys.

Crop Yield Estimates

The average yields per acre that can be expected of the principal crops under a high level of management are presented in the following table. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, or green manure crops; and harvesting that insures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change. Absence of a yield indicates that the soil is not suited to the crop or the crop is generally not grown on the soil.

Land Capability and Yields per Acre of Crops

Cumberland County And Part Of Oxford County, Maine

Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
AbE:				
Abram	7s	---	---	---
Rock Outcrop	8s	---	---	---
ACC:				
Abram	7s	---	---	---
Rock Outcrop	8s	---	---	---
Lyman	6s	---	---	---
ACE:				
Abram	7s	---	---	---
Lyman	7s	---	---	---
Rock Outcrop	8s	---	---	---
AdA:				
Adams	3s	---	16.00	---
AdB:				
Adams	3s	---	16.00	---
AdC:				
Adams	4e	---	16.00	---
AdD:				
Adams	6e	---	---	---
AED:				
Adams	7e	---	---	---
AGC:				
Adams	3s	---	---	---
Croghan	2w	---	---	---
AHC:				
Adams	3s	---	---	---
Hermon	6s	---	---	---
AHD:				
Adams	7e	---	---	---
Hermon	7s	---	---	---
Au:				
Au Gres	4w	---	---	---

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
BeB:				
Becket	2e	1000.00	22.00	330.00
BeC:				
Becket	3e	1000.00	20.00	300.00
BeD:				
Becket	4e	700.00	18.00	---
BgB:				
Belgrade	2e	---	24.00	270.00
BgC2:				
Belgrade	3e	---	20.00	240.00
BkB:				
Becket	6s	---	---	---
BkC:				
Becket	6s	---	---	---
BkD:				
Becket	6s	---	---	---
Bo:				
Biddeford	5w	---	---	---
Bp:				
Brayton	7s	---	---	---
Peacham	5s	---	---	---
BRB:				
Brayton	7s	---	---	---
Peacham	5s	---	---	---
BuB:				
Buxton	3w	---	22.00	---
BuC2:				
Buxton	4e	---	20.00	---
Ca:				
Charles	4w	---	---	---
CaB:				
Canaan	3e	---	14.00	---
CaC:				
Canaan	4e	---	12.00	---
Cb:				

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
Cb:				
Charles	4w	---	---	---
CcB:				
Colonel	3w	---	16.00	---
CcC:				
Colonel	3e	---	14.00	---
CdB:				
Colonel	6s	---	---	---
CdC:				
Colonel	6s	---	---	---
CeB:				
Canaan	6s	---	---	---
CeC:				
Canaan	6s	---	---	---
CeE:				
Canaan	7s	---	---	---
CFB:				
Colonel	6s	---	---	---
Brayton	7s	---	---	---
CgB:				
Colton	3s	---	12.00	---
CgC:				
Colton	4e	---	---	---
CHC:				
Colton	3s	---	---	---
Adams	3s	---	---	---
Ck:				
Coastal Beaches	8w	---	---	---
Cp:				
Cornish	3w	---	18.00	250.00
CrA:				
Croghan	2w	---	14.00	---
CrB:				
Croghan	2w	---	14.00	---
Cu:				

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
Cu:				
Cut And Fill Land	---	---	---	---
DeA:				
Deerfield	2w	---	16.00	---
DeB:				
Deerfield	2w	---	16.00	---
DfB:				
Dixfield	2w	600.00	20.00	270.00
DfC:				
Dixfield	3e	550.00	18.00	240.00
DsB:				
Dixfield	6s	---	---	---
DsC:				
Dixfield	6s	---	---	---
Du:				
Dune Land	8e	---	---	---
DUC:				
Dixfield	6s	---	---	---
Colonel	6s	---	---	---
DWC:				
Dixfield	3e	---	---	---
Marlow	3e	---	---	---
DXC:				
Dixfield	6s	---	---	---
Marlow	6s	---	---	---
DXD:				
Dixfield	7s	---	---	---
Marlow	7s	---	---	---
EmB:				
Elmwood	2w	---	22.00	450.00
Gp:				
Gravel Pits	8s	---	---	---
HfB:				
Hartland	2e	---	28.00	650.00
HfC2:				

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
HfC2:				
Hartland	3e	---	22.00	---
HfD2:				
Hartland	4e	---	---	---
HgB:				
Hermon	2s	650.00	16.00	450.00
HgC:				
Hermon	3e	650.00	14.00	400.00
HgD:				
Hermon	4e	650.00	---	---
HhB:				
Hermon	6s	650.00	---	---
HhC:				
Hermon	6s	650.00	---	---
HhD:				
Hermon	6s	---	---	---
HkC:				
Hermon	7s	---	---	---
HkE:				
Hermon	7s	---	---	---
HlB:				
Hinckley	3s	---	12.00	---
HlC:				
Hinckley	4e	---	---	---
HlD:				
Hinckley	6e	---	---	---
HmD:				
Hermon	7s	---	---	---
HnB:				
Hinckley	3s	---	12.00	---
Suffield	2w	---	22.00	---
HnC:				
Hinckley	4e	---	---	---
Suffield	3e	---	20.00	---
HnD:				

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
HnD:				
Hinckley	6e	---	---	---
Suffield	4e	---	18.00	---
HrB:				
Hollis	3e	450.00	14.00	---
HrC:				
Hollis	4e	450.00	14.00	---
HrD:				
Hollis	6e	---	---	---
HsB:				
Hollis	6s	---	---	---
HsC:				
Hollis	6s	---	---	---
HsE:				
Hollis	7s	---	---	---
HTD:				
Hermon	7s	---	---	---
Monadnock	7s	---	---	---
HTE:				
Hermon	7s	---	---	---
Monadnock	7s	---	---	---
HVC:				
Hermon	6s	---	---	---
Skerry	6s	---	---	---
Ls:				
Limerick	4w	---	20.00	---
Saco	6w	---	---	---
LtB:				
Lyman	6s	---	---	---
Tunbridge	6s	---	---	---
LtC:				
Lyman	6s	---	---	---
Tunbridge	6s	---	---	---
LtD:				

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
LtD:				
Lyman	7s	---	---	---
Tunbridge	6s	---	---	---
LUD:				
Lyman	7s	---	---	---
Tunbridge	7s	---	---	---
Becket	7s	---	---	---
LUE:				
Lyman	7s	---	---	---
Tunbridge	7s	---	---	---
Becket	7s	---	---	---
LWC:				
Lyman	6s	---	---	---
Tunbridge	6s	---	---	---
Monadnock	6s	---	---	---
LWD:				
Lyman	7s	---	---	---
Tunbridge	7s	---	---	---
Monadnock	7s	---	---	---
LWE:				
Lyman	7s	---	---	---
Monadnock	7s	---	---	---
Tunbridge	7s	---	---	---
LXC:				
Lyman	6s	---	---	---
Skerry	6s	---	---	---
Tunbridge	6s	---	---	---
LyB:				
Lyman	3e	---	14.00	---
LyC:				
Lyman	4e	---	12.00	---
LzB:				

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
LzB:				
Lyman	6s	---	---	---
LzC:				
Lyman	6s	---	---	---
LzE:				
Lyman	7s	---	---	---
MaB:				
Marlow	2e	---	22.00	330.00
MaC:				
Marlow	3e	1000.00	20.00	300.00
Md:				
Made Land	8s	---	---	---
MeC:				
Melrose	3e	---	22.00	500.00
Mk:				
Medomak	6w	---	---	---
MkB:				
Merrimac	2s	---	18.00	450.00
MkC:				
Merrimac	3e	---	16.00	400.00
ML:				
Medomak	6w	---	---	---
Wonsqueak	7w	---	---	---
MnB:				
Monadnock	2e	700.00	18.00	---
MnC:				
Monadnock	3e	700.00	16.00	---
MvC:				
Monadnock	6s	---	---	---
MvD:				
Monadnock	6s	---	---	---
MWC:				
Hermon	3e	---	---	---
Monadnock	3e	---	---	---
Skerry	2e	---	---	---

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
MXC:				
Monadnock	6s	---	---	---
Skerry	6s	---	---	---
Nb:				
Naumburg	4w	---	---	---
NCB:				
Naumburg	4w	---	---	---
Croghan	2w	---	---	---
NvB:				
Nicholville	2e	---	20.00	270.00
On:				
Ondawa	1	---	26.00	550.00
PbB:				
Paxton	2e	1000.00	24.00	550.00
PbC:				
Paxton	3e	1000.00	22.00	500.00
PbD:				
Paxton	4e	1000.00	20.00	---
PfB:				
Paxton	6s	750.00	---	---
PfC:				
Paxton	6s	900.00	---	---
PfD:				
Paxton	6s	---	---	---
PkB:				
Peru	2e	---	20.00	500.00
PkC:				
Peru	3e	500.00	18.00	400.00
PlB:				
Peru	6s	500.00	---	---
PlC:				
Peru	6s	---	---	---
Py:				
Podunk	2w	---	24.00	500.00
RbA:				

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
RbA:				
Ridgebury	4w	---	16.00	---
RgA:				
Ridgebury	7s	---	---	---
Ro:				
Rock Land	8s	---	---	---
Lyman	7s	---	---	---
Ru:				
Rumney	4w	---	20.00	---
RZ:				
Rumney	4w	---	---	---
Podunk	2w	---	---	---
Sd:				
Saugatuck	4w	---	---	---
Se:				
Searsport	5w	---	---	---
SkB:				
Skerry	2e	---	18.00	---
SkC:				
Skerry	3e	---	16.00	---
Sn:				
Scantic	4w	---	16.00	---
SnB:				
Skerry	6s	---	---	---
SnC:				
Skerry	6s	---	---	---
SnD:				
Skerry	6s	---	---	---
So:				
Scarboro	5w	---	---	---
SOC:				
Skerry	2e	---	---	---
Becket	3e	---	---	---
SOD:				
Skerry	4e	---	---	---

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
SOD:				
Becket	6e	---	---	---
Sp:				
Sebago	8w	---	---	---
SRC:				
Skerry	6s	---	---	---
Becket	6s	---	---	---
SRD:				
Skerry	6s	---	---	---
Becket	7s	---	---	---
SSC:				
Skerry	2e	---	---	---
Colonel	3w	---	---	---
STC:				
Skerry	6s	---	---	---
Colonel	6s	---	---	---
STD:				
Skerry	6s	---	---	---
Colonel	6s	---	---	---
SuC2:				
Suffield	4e	---	20.00	---
SuD2:				
Suffield	6e	---	---	---
SuE2:				
Suffield	7e	---	---	---
Sz:				
Swanton	4w	---	18.00	---
Tm:				
Tidal Marsh	8w	---	---	---
TyB:				
Tunbridge	2e	550.00	20.00	---
Lyman	3e	---	14.00	---
TyC:				
Tunbridge	3e	550.00	18.00	---

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
TyC:				
Lyman	4e	---	12.00	---
TyD:				
Tunbridge	4e	500.00	15.00	---
Lyman	6e	---	---	---
UaC:				
Urban Land	8s	---	---	---
Adams	3s	---	---	---
UhC:				
Urban Land	8s	---	---	---
Hermon	3e	---	---	---
Va:				
Vassalboro	8w	---	---	---
Vb:				
Vassalboro	8w	---	---	---
VW:				
Vassalboro	8w	---	---	---
Wonsqueak	7w	---	---	---
W:				
Water Bodies Greater	---	---	---	---
Wa:				
Walpole	4w	---	18.00	---
Wg:				
Whately	5w	---	---	---
Wh:				
Whitman	5w	---	---	---
Wk:				
Wonsqueak	7w	---	---	---
WmB:				
Windsor	3s	---	14.00	---
WmC:				
Windsor	4e	---	12.00	---
WmD:				
Windsor	6e	---	---	---
WrB:				

Land Capability and Yields per Acre of Crops - Continued

Cumberland County And Part Of Oxford County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
WrB:				
Woodbridge	2e	500.00	24.00	450.00
WrC:				
Woodbridge	3e	500.00	22.00	400.00
WS:				
Wonsqueak	7w	---	---	---
Searsport	5w	---	---	---
WsB:				
Woodbridge	6s	500.00	---	---
WsC:				
Woodbridge	6s	500.00	---	---